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Ethridge et al.

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(54) **SYSTEM OF EXTRACTION OF VOLATILES
FROM SOIL USING MICROWAVE
PROCESSES**

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(51) **Int. Cl.**
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(52) **U.S. Cl.** **219/679**

(58) **Field of Classification Search** 219/679
See application file for complete search history.

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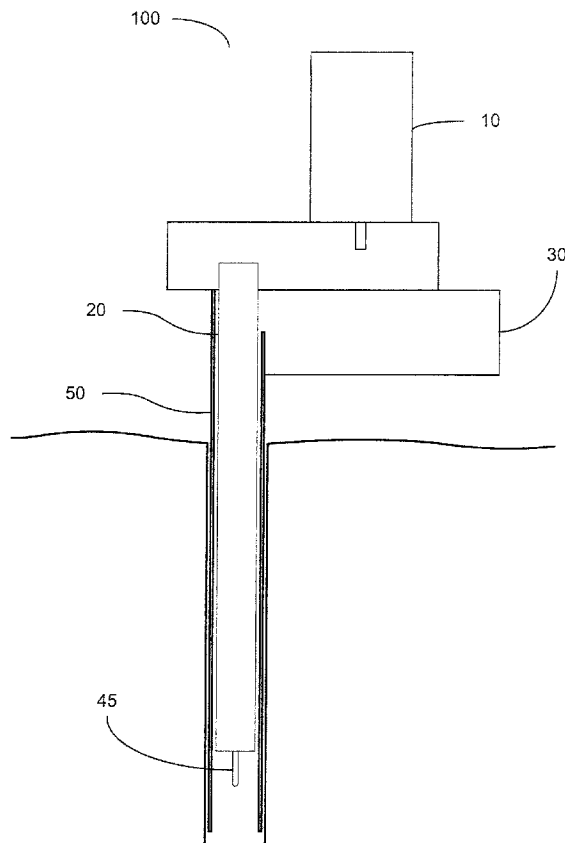
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(57) **ABSTRACT**

A device for the extraction and collection of volatiles from soil or planetary regolith. The device utilizes core drilled holes to gain access to underlying volatiles below the surface. Microwave energy beamed into the holes penetrates through the soil or regolith to heat it, and thereby produces vapor by sublimation. The device confines and transports volatiles to a cold trap for collection.

19 Claims, 3 Drawing Sheets



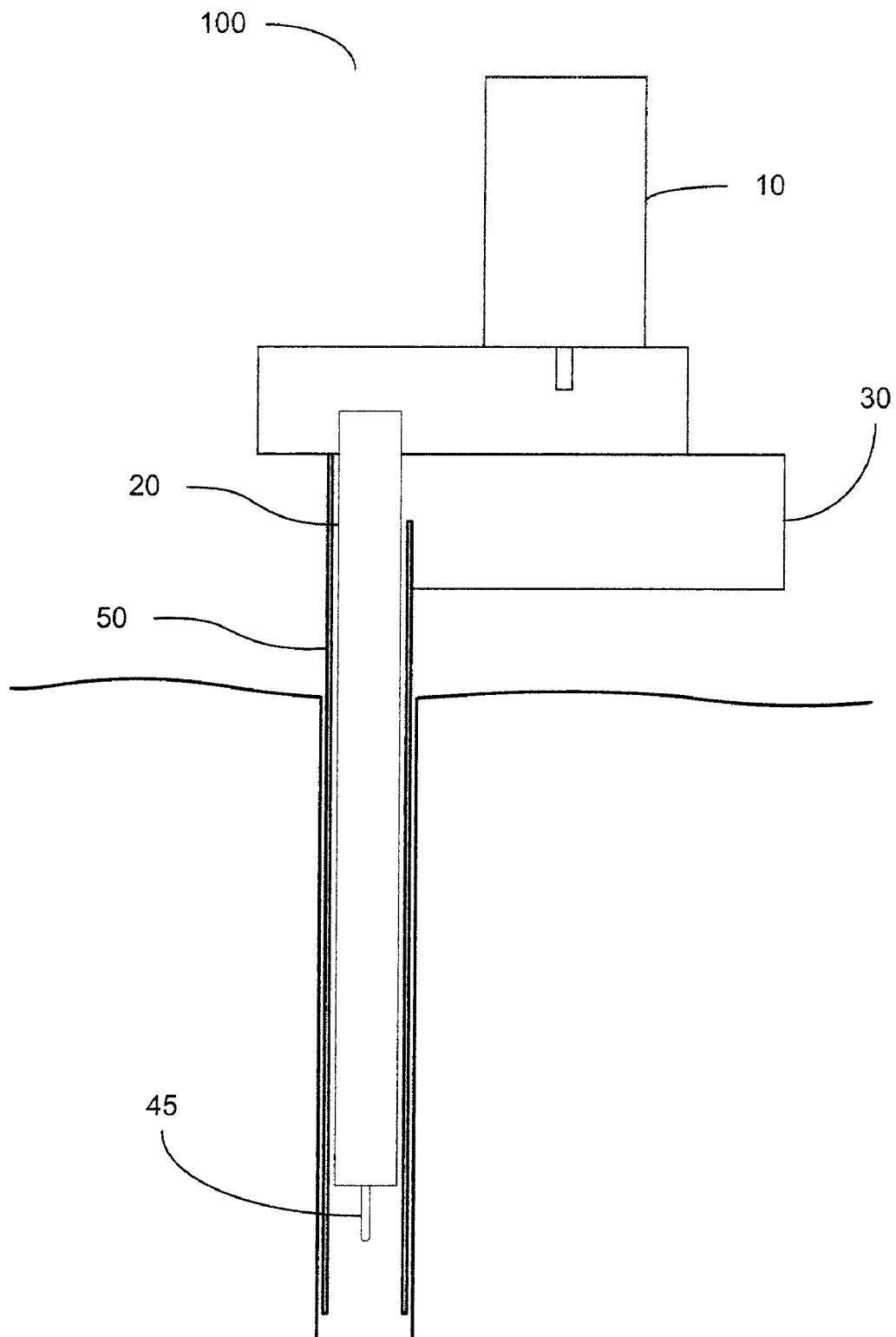


Figure 1